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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,197	11/28/2001	Srikanth Gummadi	TI-33211	1292

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EXAMINER
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CORRIELUS, JEAN B

ART UNIT	PAPER NUMBER
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2637

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/996,197

Applicant(s)

GUMMADI ET AL.

Examiner

Jean B Corielus

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-24 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9-14 is/are rejected.
- 7) ☒ Claim(s) 5-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/26/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on 6/24/05. These drawings are acceptable.

### ***Claim Objections***

2. Claims 3-8 and 15-24 are objected to because of the following informalities.

Claim 3, last line, "single" should be inserted before "digital" so as to be consistent with antecedent in claim 1, line 4. the same comment applies to claim 5, line 3; claim 6, last line; claim 7, line 1; claim 8, line 1; claim 15, line 7 and claim 21, line 13. claim 15, line 8, "vale" should be "value". Claim 18, "sufficiently" and "at least" should be deleted.

Claim 20, shouldn't "location stores" be "location store"? claim 21, line 14, "vale" should be "value". Note that any claim whose base claim is objected is likewise objected. Appropriate correction is required.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-4 and 10-14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 8-10 of copending Application No. 10/085,562. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the application is encompassed by claim 1 of the co-pending application as all limitation of claim 1 of the application are included in claim 1 of the co-pending application. Hence, claim 1 of the application is the broader version of claim 1 of the copending application. Given that, it would have been obvious to one skill in the art to present the claim of the application as a variation of the claim of the co-pending application as such modification would have only provided an alternate way to claim the invention in such a way as to broaden the scope of the claim.

Claim 2 is the same as claim 8 of the copending application. The same analysis applies.

Claim 3 is the same as claim 9 of the copending application. The same analysis applies.

Claim 4 is the same as claim 10 of the copending application. The same analysis applies.

As per claim 10, it would have been obvious to one skill in the art to combine the correlation result so as to generate a single correlation indicating of the entire received sequence.

As per claim 11, it would have been obvious that the threshold would have been predetermined so as to ensure that only accurate correlation signals are generated.

As per claim 12, it would have been obvious that the threshold is adaptive and its value is changed depending on network conditions so as to improve system stability.

As per claim 13, it would have been obvious that the boundary detection would have been performed after each sample value is received so as to satisfy system requirements.

As per claim 14, it would have been obvious to one skill in the art that the boundary detection would have been performed after a specified number of sample value is received so as to satisfy system requirements.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art figs. 1-6 in view of Radi US Patent No. 6,594,327.

As per claim 1, applicant background of the invention and admitted prior art figs. 1-6 disclose a method and apparatus (fig. 6) comprising receiving the stream of digital sample values fig. 2; correlating a digital sample value with a plurality of received digital sample values 610; calculating a correlation value based on the correlation 620; comparing the correlation value against a threshold, and determining the presence of the boundary based on the comparison see page 2, line 29-page 3, line 2. However, the admitted prior art figure 6 does not explicitly teach "a single digital value" is correlated with a plurality of received digital sample values. In the same field of endeavor, Radi teaches the step of correlating in correlator 504 "a single digital value" output by 512 a plurality of received digital sample values output of buffer 502. See col. 9, lines 61-65. Given that fact, it would have been obvious to one skill in the art to modify applicant's admitted prior art figure 6 in the manner taught by Radi so as to improve system configuration and/or performance.

As per claim 2, the plurality of received digital sample values are selected from the received stream based on their position in different periods of a periodic sequence see fig. 6.

As per claim 9, the received stream is stored in memory see page 13, lines 13-15, and wherein the correlating step comprises: comparing the digital sample value with the plurality of received digital sample values; generating a one value for each time the digital sample value matches with one of the digital sample values in the plurality; and generating a zero value for each time the digital sample value does not match with one of the digital sample values in the plurality see page 14, lines 10-13.

As per claim 10 the calculating step comprises 2 summing up a correlation result resulting from each correlation of the digital sample value with the plurality of previously received digital sample values see adder 620.

As per claim 11, the threshold is predetermined. See page 2, line 21.

The additional limitation, recited in claim 12, is old and well established in the art. It would have been obvious to one skill in the art to incorporate such a limitation in applicant's background of the invention and Radi so as to improve system stability.

As per claim 13, the boundary detection is performed after each sample value is received. See page 3, line 4-6.

As per claim 14, the boundary detection is performed after a specified number of sample values is received see page 3, lines 6-9.

### ***Allowable Subject Matter***

7. Claims 5-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 15-24 are allowed. However, the claim must be amended , if necessary, to overcome any objection sets forth above.

### ***Response to Arguments***

9. Applicant's arguments, see pages 7-8 of the comment, filed on 6/24/05, with respect to the rejection(s) of claim(s) 1, 2 and 9-14 under 102/102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Radi, US Patent No. 6,594,327.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Maxi-Flex.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jean B Corrielus  
Primary Examiner  
Art Unit 2637

9/16/05